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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,898	07/30/2003	Christian Lamothe	Q-76646	6243

7590 12/30/2005  
SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, NW  
Washington, DC 20037-3213

EXAMINER

VU, MICHAEL T

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/629,898	<b>Applicant(s)</b> LAMOTHE, CHRISTIAN	
	<b>Examiner</b> Michael Vu	<b>Art Unit</b> 2683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/30/2003</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards (US 5,848,361) in view of Takai (US 5,561,673).

Regarding **claims 1 and 4**, Edwards teaches a portable antenna comprising a first reception stage including three antennae oriented so as to form a substantially orthogonal reference mark (Fig. 4, shows strongest signal), capable of receiving an external signal within a given frequency range (Fig. 4, C3, L40-45), a second processing stage for the signals delivered at the outputs of said antennae (Fig. 4, C3, L35-67), and **but is silent on** a third stage for selecting one of the signals delivered at the output of

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said second processing stage, wherein said second processing stage includes first and second phase-shifters connected at the output of two of said antenna, said signals delivered at the output of these two antennae being phase-shifted by an angle of  $\pi/2$  or  $3\pi/2$  in relation to each other, and means for combining said phase-shifted signals forming a first signal delivered to said third selection stage, wherein said signal delivered by the third antenna corresponds to a second signal delivered to said selection stage, and wherein said third selection stage includes means for selecting from among said two signals delivered at the output of said second stage, either the signal having the largest amplitude, or one of the two signals having an amplitude larger than a reference amplitude, or arbitrarily one of the two signals if they have the same amplitude.

However, Takai teaches a plurality of physically separated antennas that switched diversity receiver which included a received signal strength indicator RSSI. (Abstract, Fig. 10, C9, L20-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Edwards, such that a third stage for selecting one of the signals delivered at the output of said second processing stage, wherein said second processing stage includes first and second phase-shifters connected at the output of two of said antenna, said signals delivered at the output of these two antennae being phase-shifted by an angle of  $\pi/2$  or  $3\pi/2$  in relation to each other, and means for combining said phase-shifted signals forming a first signal delivered to said third selection stage, wherein said signal delivered by the third antenna corresponds to a

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second signal delivered to said selection stage, and wherein said third selection stage includes means for selecting from among said two signals delivered at the output of said second stage, either the signal having the largest amplitude, or one of the two signals having an amplitude larger than a reference amplitude, or arbitrarily one of the two signals if they have the same amplitude, to provide an economical antenna switched diversity and to select the strongest signal of diversity antenna.

Regarding **claim 2**, Edwards teaches the portable receiver according to claim 1, and further teaches wherein corrector means for correcting the attenuation introduced by the first and second phase-shifters, are placed between said third antenna and the corresponding input of said selection means (C2, L52-67 to C3, L1-7, and claim 2 reads on).

Regarding **claim 3**, Edwards teaches the portable receiver according to claim 2, wherein a first amplifier is placed between the means for combining the phase-shifted signals and said selection means and wherein a second amplifier is placed between the corrector means and said selection means (C2, L52-67 to C3, L1-7, and claim 2 reads on).

Regarding **claim 5**, Edwards teaches the portable receiver according to claim 4, Edwards teaches wherein said second processing stage further includes first and second filtering means respectively placed between said first and second means for raising to the second power and the adder=combiner=summer (Abstract, Fig. 1 to Fig. 3, C1, L45-57, C2, L1-10).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Jasper US 5,553,102
2. Miyoshi US 6,477,213
3. Carloni US 6,895,253
4. Tsujimoto US 5,493,307
5. Lee US 2004/0196805
6. Seki US 2004/0162021
7. Takahashi US 6,226,508

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00am - 6:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael T. Vu



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